

COLEOPTERA OF BAJA CALIFORNIA.

(SUPPLEMENT I.)

BY GEORGE H. HORN.

[With Plate xx.]

The following additional account of Coleoptera from the Cape Region of Baja California is the result of the examination of new collections received from the California Academy of Sciences since the publication of my last paper. The result is the addition of fifty-two species, half of which are new. The collections were made by the expedition sent out by the Academy to the Cape Region and the Pacific mainland of Mexico during the month of September, 1894.

One of the most interesting in the matter of distribution is a specimen which I am compelled to refer to *Calosoma Sayi*, unfortunately a female and without legs. The discovery of the male may prove it to be a distinct species.

This as well as the former collections from the Cape Region of Baja California contains a few species identical with those from the Pacific mainland of Mexico, indicating the varied origin of the Cape Region fauna. The types will be found in the collection of the Academy of Sciences in San Francisco.

CARABIDÆ.

* *CALOSOMA SAYI* Dej. The unique female is rather smaller than those found in the States. Pennsylvania to Texas. San José del Cabo.

DYSCHIRIUS TRUNCATUS Lec. Colorado, Nevada, California, Arizona. San José del Cabo.

* On the day after the proof-sheets of these pages left me a male of the *Calosoma Sayi* was received, enabling me to state with certainty that it agrees in all details with the forms from the Atlantic region.

BEMBIDIUM JUCUNDUM n. sp. San José del Cabo, Sierra San Lazaro.

PRISTONYCHUS COMPLANATUS Dej. More decidedly black than the specimens from California. Probably introduced through commerce. Europe, California. San José del Cabo.

EUPHORTICUS PUBESCENS Dej. The unique example is of the Central American type mentioned by Bates in which the surface is decidedly brassy and the thorax slightly broader with more arcuate sides. Occurs from North Carolina southward through Mexico to Santa Catharina, Brazil. San José del Cabo.

TETRAGONODERUS PALLIDUS Horn. San Diego, Cal., Tucson, Ariz. Sierra El Taste.

TETRAGONODERUS FASCIATUS Hald. Eastern United States from Michigan southward, Texas, Arizona, southern California. San José del Cabo.

APENES LUCIDULA Dej. The specimen referred to this name is duller than usual and the surface sculpture better marked. From the method of variation of the species it seems unwise to describe the unique as a distinct species. There are no Mexican forms allied to it. Eastern United States. Sierra San Lazaro.

DYTISCIDÆ.

CELINA ANGUSTATA Aubé. Atlantic region and Florida to Texas. San José del Cabo.

HYDROPHILIDÆ.

CERCYON RUFESCENS n. sp. Sierra San Lazaro.

STAPHYLINIDÆ.

TACHYPORUS CHRYSOMELINUS Linn. Europe, Atlantic States. San José del Cabo.

SILPHIDÆ.

SILPHA TRUNCATA Say. Kansas, New Mexico. Sierra San Lazaro.

SCYDMÆNIDÆ.

EUMICRUS LUCANUS n. sp. Arizona. San José del Cabo.

COCCINELLIDÆ.

SCYMNUS COLLARIS Mels. Canada to Texas. San José del Cabo.

SCYMNUS CINCTUS Lec. (*suturalis* Lec.) Louisiana westward to Los Angeles. San José del Cabo.

SCYMNUS ARDELIO Horn. Separated by me from the series formerly called *marginicollis* from which it differs in usually red legs and the absence of tubercle on first ventral of male. California, Arizona. San José del Cabo.

CRYPTOPHAGIDÆ.

TOMARUS BISIGNATUS n. sp. San José del Cabo.

DERMESTIDÆ.

ATTAGENUS PICEUS Oliv. Cosmopolitan. Sierra San Lazaro.

HISTERIDÆ.

PAROMALUS (Carcinops) VIRIDICOLLIS Mars. To this is referred *P. mimeticus* Horn. Arizona, Mexico. Sierra Laguna.

SAPRINUS OREGONENSIS Lec. The unique differs from typical forms in having the punctures of the apex less extended toward the humeri. Oregon, California. Sierra San Lazaro.

DASYLLIDÆ.

SCIIRTES HUMERALIS n. sp. San José del Cabo.

ELATERIDÆ.

HORISTONOTUS DENSUS Lec. Sierra San Lazaro and San José del Cabo.

LAMPYRIDÆ.

MALTHODES LUCANUS n. sp. San José del Cabo.

TELEGEUSIS DEBILIS n. g., n. sp. Sierra San Lazaro.

CLERIDÆ.

CREGYA VETUSTA Spin. Pennsylvania to Missouri. San José del Cabo.

HYDROCERA DISCOIDEA Lec. Very variable in its coloration. Texas, Arizona. Calmalli Mines and Sierra San Lazaro.

PTINIDÆ.

GIBBIUM SCOTIAS Scop. Europe, Atlantic States. San José del Cabo.

PITNUS PYGMÆUS Ghm. By error this appears in the previous list as a *Ptinus*.

PASSALIDÆ.

NELEUS TLASCALA Perch. Mexico. San José del Cabo. Identified through a series sent to the National Museum by the editors of *Biologia Centrali-Americana*.

SCARABÆIDÆ.

OCHODÆUS PENINSULARIS n. sp. Sierra San Lazaro, Sierra El Taste.

CERAMBYCIDÆ.

RHOPALOPHORA BICINCTA n. sp. San José del Cabo.

DECTES SPINOSUS Lec. Middle States to Kansas, Texas. Mexico. Sierra San Lazaro.

LEPTOSTYLUS BIUSTUS Lec. Widely distributed in the Atlantic region, Texas. San José del Cabo.

DYSPHAGA DEBILIS n. sp. San José del Cabo.

CHRYSOMELIDÆ.

LEMA TRILINEATA Oliv. Atlantic States, Texas, Arizona, Mexico. San José del Cabo.

LEMA OMOGERA Horn. This species varies with the elytra entirely yellow.

GRIBURIUS MONTEZUMA Suff. The generic name *Scolochrus* is adopted by European authors, although three years posterior to Haldeman's name. Suffrian (Linn. Ent., vii, p. 104) suppresses the older name for no valid reason. Arizona, Mexico. San José del Cabo.

METACOLASPIS CONSPERSA n. sp. San José del Cabo.

COLASPIS MÆSTA n. sp. San José del Cabo.

BLEPHARIDA ATRIPENNIS n. sp. San José del Cabo.

CALLIGRAPHA ANCORALIS Stal. Mexico, Sierra San Lazaro.

CREPIDODERA PENINSULARIS n. sp. San José del Cabo.

PSYLLIODES CONVEXIOR Lec. Atlantic States, Texas, Nevada and California. San José del Cabo.

BRUCHIDÆ.

BRUCHUS DISTINGUENDUS Horn. Florida, Arizona, Sierra San Lazaro.

TENEBRIONIDÆ.

TRIPHALUS CRIBRICOLLIS n. sp. Miraflores.

EURYMETOPON PUNCTULATUM Lec. By an oversight, this species appears twice on page 347 of my previous paper.

ANTHICIDÆ.

XYLOPHILUS BRUNNIPENNIS Lec. Canada, Georgia, Arizona, California. El Taste, La Paz.

MELOIDÆ.

MACROBASIS LANGUIDA n. sp. San José del Cabo.

CURCULIONIDÆ.

CLEONUS QUADRILINEATUS Chev. Kansas, Texas, New Mexico, Arizona. Sierra San Lazaro.

OTIDOCEPHALUS ALTERNATUS n. sp. La Paz.

OTIDOCEPHALUS SPARSUS n. sp. Cape Region, probably.

CONOTRACHELUS LUCANUS n. sp. San José del Cabo.

ZASCELIS OBLONGA n. sp. Arizona. Sierra San Lazaro.

COPTURUS SOBRINUS n. sp. La Paz, Sierra San Lazaro, Sierra El Taste.

SCOLYTIDÆ.

XYLEBORUS sp. Closely related to *xylographus*, and a little larger. One specimen. San José del Cabo.

DESCRIPTIONS OF NEW SPECIES.

The following pages contain descriptions of those indicated as new in the preceding list, together with notes on some previously recorded. I have availed myself of the kind permission previously accorded by the publication committee and have added descriptions of a few species from related regions.

BEMBIDIUM JUCUNDUM n. sp.

Form of *axillaris*, but somewhat more robust, piceous, shining, head and thorax slightly bluish-green, elytra with a broad pale vitta with irregular sides extending from base to apex between the third and seventh striæ. Antennæ and palpi testaceous. Head smooth, polished, frontal striæ double, convergent, eyes large and prominent. Thorax nearly twice as wide as long, sides moderately strongly arcuate and narrowing posteriorly, hind angles scarcely evident, not carinate, base with short peduncle; disc convex, polished, median line extremely fine. Elytra

oblong oval, one-third longer than wide, humeri obtuse, disc feebly convex, striæ composed of moderate punctures not closely placed, obliterated at apical third, sutural stria at apical half and the eighth impressed, the latter distant from the margin, third interval finely bipunctate, punctures near the third stria. Body beneath smooth and shining. Legs and coxæ yellowish testaceous. Length, .14 inch; 3.5 mm.

This pretty little species belongs to the group xv, as defined by Dr. LeConte (Proc. Acad. Phil., 1857, p. 5), containing *axillare*, *quadrimaculatum et al.*, to which group *B. sphaeroderum* and *cyclodes* Bates (Biol. 1, pp. 147 and 290) probably belong. In fact, the present species seems closely allied to *cyclodes*.

Two specimens. San José del Cabo and Sierra San Lazaro.

CYMINDIS CALIFORNICA n. sp.

Piceous feebly shining, elytra paler, legs testaceous. Antennæ brownish, basal joint paler. Head not closely punctate. Thorax distinctly broader than long, trapezoidal, sides arcuate in front, slightly sinuate posteriorly, hind angles distinct, not prominent, side margin not translucent nor reflexed, disc very feebly convex, coarsely punctate at sides and base, more sparsely at middle, median line fine, sutural margin with three setæ, the middle one short. Elytra very finely striate, striæ with fine indistinct punctures, intervals flat, indistinctly alutaceous and with one series of irregularly placed punctures, each with a very short hair. Body beneath piceous, very sparsely punctate. Length, .30 inch; 7.5 mm.

A small species without translucent side-margin to the thorax and with the thorax very distinctly wider than long. It is therefore more allied to *unicolor* than any other in our fauna. The latter has, however, but one lateral set-

igerous puncture and the side margin of thorax distinctly reflexed and the disc convex and coarsely closely punctate. The elytral intervals are also closely punctate. In the present species the side margin of the thorax is not at all reflexed and the disc as flat as in *Apenes nebulosa*.

One specimen. San Luis Obispo. (Chas. Fuchs.) This is the first instance of the occurrence of *Cymindis* in California.

APENES LIMBATA n. sp.

Form of *nebulosa*, head and thorax rufo-testaceous, elytra piceous with a broad lateral pale margin, a humeral lunule and a somewhat sinuous band near the apex testaceous. Antennæ pale. Head finely rugulose and sparsely finely punctate. Thorax alutaceous, faintly wrinkled and very sparsely punctulate, median line distinct from base to apex. Elytra with fine striæ, finely punctulate, intervals distinctly alutaceous, sparsely minutely punctulate. Body beneath and legs testaceous, abdomen piceous, paler at middle. Length, .30 inch; 7.5 mm.

The pale lateral border covers the outer three intervals. The humeral lunule is like that of many *Cicindelæ*. The apical band is very near the apex and is composed of short lines on the intervals, the innermost one being at the sutural angle.

This species is entirely unlike any in our fauna in its paler color and especially the pale sides of the elytra. This is the first indication of the occurrence of *Apenes* in the California fauna. One specimen collected at San Luis Obispo and given me by Mr. Chas. Fuchs.

Having had occasion to refer to an essay of Baron Chaudoir on some "Aberrant genera of the group *Cymindides*" (Bull. Mosc., 1875, ii, pp. 1-61 in sep.), there was observed a species described as *A. opaca*, the name having been used by LeConte in 1866.

HYDROCHARIS RICKSECKERI n. sp.

Oblong oval, slightly broader behind the middle, form of *castus*, beneath black, above piceous with olivaceous tinge, margin of thorax and elytra yellow. Antennæ, legs and palpi yellow, the trochanters piceous. Head finely punctulate. Thorax finely punctulate with three groups of coarse punctures, one near the front angle, a second oblique line each side of middle in front, a third more numerous from the middle of the side obliquely backward. Elytra minutely punctulate with the usual series of coarse punctures. Prosternum not prolonged at apex. Tarsal claws abruptly bent, with a broad lobe at base. Length, .46 inch; 11.5 mm.

The yellow lateral border of the thorax is narrow and well defined, that of the elytra broader but not sharply limited.

One specimen. Harris' Pond, near Santa Rosa, Cal. Ricksecker.

The species of *Hydrocharis*, four in number, equally divided between the Atlantic and Pacific regions. They are as follows:

Prosternum prolonged in point behind the coxæ.

Maxillary palpi long.

castus.

Prosternum not prolonged.

Piceous with entire border yellow.

Rickseckeri.

Piceous slightly bronzed.

obtusatus.

Surface pale glaucous green.

glaucus.

CERCYON RUFESCENS n. sp.

Oval, convex, form of *tristis*, rufescent moderately shining. Head and thorax sparsely finely punctate. Thorax without basal marginal line. Elytra without impressed striæ but with rows of moderate punctures not closely placed, the eighth, ninth and tenth rows with the punctures deeper and closer for part of their length; intervals flat, equal in width, irregularly biserially punc-

tate. Body beneath colored as above. Metasternal area not well defined, moderately coarsely punctate. Mesosternum oval, acute in front, coarsely punctured. Prosternum strongly carinate. Length, .08 inch; 2 mm.

From its form and the fact that the head is vertical the species seems best placed near *tristis* and *floridanus*, but it differs from all of that series by its pale color, which is not due to immaturity. At first glance it would be taken for an *Olibrus*.

One specimen. Sierra San Lazaro.

ANISOTOMA MERKELIANA n. sp.

Oval, slightly oblong, moderately robust, piceous black, shining. Antennæ rufo-testaceous, the outer three joints piceous. Head sparsely punctate but with four large vertical punctures in a transverse row. Thorax more than twice as wide as long, sides strongly arcuate, hind angles broadly rounded, disc sparsely punctate with a few coarse punctures along the base. Elytra moderately coarsely striato-punctate, intervals flat, minutely sparsely punctulate, the intervals 3-5-7-9 with the usual series of very coarse distant punctures. Body beneath piceous black, shining, sides of metasternum coarsely punctured, abdomen less coarsely punctured. Legs piceous black. Length, .16 inch; 4 mm. Pl. xx, fig. 7.

This species so closely resembles *valida* and agrees with it in most of its characters so closely that it is probable the females cannot be separated. In the present species the posterior femora has a large tooth near the outer condyle, the distal edge oblique, the tibiæ are slightly sinuate not curved as in *valida*. In the latter the posterior femur is strongly angulate at its middle.

One male from the State of Washington, kindly given me by Mr. Merkel, to whom I take pleasure in dedicating it.

EUMICRUS LUCANUS n. sp.

Reddish brown, sparsely clothed with paler, semi-erect hair. Antennæ slender longer than half the body, fifth joint as long as the preceding two and slightly longer than the two following. Head shining, very minutely sparsely punctate. Thorax longer than wide, apex narrower than base, sides regularly arcuate, widest one-third from apex, disc convex, sparsely and minutely punctulate, at base moderately quadrifoveolate. Elytra not wider at base than the thorax, a slight depression within the humeri, widest at middle, disc convex, surface indistinctly punctulate. Tarsi slender, longer than half the tibiæ. Length, .06 inch; 1.5 mm.

The male has the anterior tarsi slightly dilated.

This species is evidently allied to *commilitonis*, as described and figured by Dr. Sharp (Biol. 11, pt. 1, p. 67, pl. 2, fig. 22), but is of more elongate form and with more slender antennæ.

One specimen. San José del Cabo, with which I associate two from Arizona in my cabinet.

There are now six species of this genus known in our faunal limits—*grossus*, *Motschulskii*, *vestalis*, *Caseyi*, *lucanus* and *Zimmermanni*. The latter species has for a synonym *punctatus* Casey. The genus *Cholerus* has, in Mexico, half more species than *Eumicrus*, but none are yet known to me from our fauna. *E. Caseyi* Brend., which is unknown to me, is remarkable in its polished surface.

PIESTUS EXTIMUS Sharp (Biol. 1, pt. 2, p. 713).

Through the kindness of Mr. Ricksecker I have a specimen which I refer to this species, collected in Arizona. The type is from Chihuahua. *P. erythropus* Er. is said by Fauvel (Bull. Soc. Linn., Norm., ix, p. 29) to have occurred at Opelousas.

ZALOBIOUS Lec. Trans. Am. Ent. Soc. v, p. 49, March, 1874.

This genus is introduced with the desire to give sketches of the head and thorax of the two known species. At the same time some additional characters will be made known and a new form allied to *Zalobius* described.

The two species differ greatly in the form of the thorax, as will be seen by reference to the plate. On both the disc is quadricostate, the costæ abbreviated and indistinct in *spinicollis*, entire and well marked in *serricollis*.

The terminal joint of the maxillary palpi is scarcely twice as long as the third joint, although Dr. LeConte gives it greater length. The gular sutures coalesce at their middle, forming but one, as will be observed in all the genera in our fauna of the sub-tribe Coprophilini, of which *Zalobius* is a member, as stated by LeConte. The outer five joints of the antennæ are described as rather abruptly wider (Class. Col. N. A., ed. 1883, p. 103), while in *Syntomium* but three joints are so. While this character is fairly good, it will be observed that the structure of the joints themselves affords a more certain character. In *Zalobius* the last four joints have the dense punctuation indicating their sensitive character; the joints one to seven are smooth, and in *spinicollis* without hairs, in *serricollis* somewhat hairy. In *Syntomium* the last three joints have the dense punctuation, the other joints glabrous but hairy.

It will also be observed that the head is considerably prolonged behind the eyes in both species of *Zalobius*, suddenly narrowed to a neck, while the head is not capable of retraction on account of the elevation of the back of the head above the neck. Of the genera of Coprophilini, *Coprophilus* is the only one with spinules on the outer edge of the tibiæ.

These characters have been passed in review with the view of suggesting a modification of the arrangement of the genera of Coprophilini as represented in our fauna. In the table of the classification above quoted the "Oxytelini genuini" and "Coprophilini," as defined by Erichson (Staph., p. 30), have been included in one group, Oxyteli, but it now seems to me better to revert to the Erichson method and separate the genera with five-jointed tarsi from those with but three.

The genera may be arranged in the following manner:

Tibiæ spinulose on the outer edge.

Antennæ gradually thicker, the outer five joints with sensitive punctation and pubescence. *Coprophilus.*

Tibiæ not spinulose.

Maxillary palpi rather short and stout, the terminal joint shorter than the third. Antennæ with three outer joints obviously wider. *Syntomium.*

Maxillary palpi rather slender and elongate, the terminal joint longer than third.

Gular sutures confluent at middle.

Middle coxæ cavities confluent. Antennæ not stouter externally. Elytra not costate. *Deleaster.*

Middle coxæ cavities distinctly separated.

Antennæ with outer five joints stouter. Elytra distinctly costate. *Zalobius.*

Gular sutures separated their entire length. Middle coxæ cavities separated.

Maxillary palpi very slender. Outer four joints of antennæ stouter. Elytra costate. *Asemobius.*

Zalobius is represented by two species.

ZALOBIOUS SPINICOLLIS Lec. Trans. Am. Ent. Soc., v, 1874, p. 49.

Occurs from Vancouver southward to Santa Clara (Ricksecker). Pl. xx, fig. 8.

ZALOBIOUS SERRICOLLIS Lec. Loc. and cit., 1875, p. 170.

Collected by me at Fort Tejon, not Owens Valley, as stated by LeConte. Pl. xx, fig. 9.

ASEMOBIUS n. g.

Form elongate, much depressed, surface moderately shining. Head moderate in size, scarcely longer than wide, slightly prolonged behind the eyes, very abruptly constricted, the occiput not elevated transversely at the constriction. Mandibles moderately prominent, acute at tip, toothed at middle. Labrum transverse, truncate. Maxillary palpi long and slender, the last joint a little longer than the third. Antennæ slender, first joint cylindrical, stout, second shorter and more slender, third very slender and nearly as long as the first two, joints four to seven equal in length, slender, slightly thickened at their distal end, joints one to seven glabrous with few hairs, joints eight to ten quadrate, broader, eleventh more elongate, joints eight to eleven densely punctulate and pubescent. Prothorax with sides explanate and serrate. Elytra quadrate, emarginate at base, apex truncate, acutely notched each side, disc costate. Abdomen depressed, gradually narrowed to apex, sides widely margined. Middle coxæ separated. Legs slender, tibiæ not spinulose. Tarsi slender, joints one to four nearly equal, fifth as long as the three preceding united.

ASEMOBIUS CÆLATUS n. sp.

Pale castaneous, moderately shining. Head slightly concave each side, surface coarsely reticulate. Thorax broader than long, the disc convex along the middle, sides laminate lateral margin broadly arcuate, subangulate and obliquely narrowed behind the middle, edge coarsely serrulate, disc with two feeble costæ near the middle which are bifurcate posteriorly, surface with very coarse rather closely placed umbilicate punctures. Elytra conjointly a little wider than long, side margin acute and crenulate, disc with striæ of coarse punctures wider than the intervals, the third and seventh intervals elevated the former

two-thirds, the latter the entire length of elytra. Abdomen longer than the elytra, sparsely punctate, with short golden hairs. Prothorax beneath with few very coarse punctures at middle, polished at the sides, abdomen sparsely punctate gradually more closely to apex. Length, .17 inch; 4.5 mm. Pl. xx, fig. 10.

Male. Last ventral with a deep oval emargination, the face of the segment slightly flattened.

The genus *Asemobius* proposed above is allied to *Zalobius*, but differs in having the gular sutures separated and by the terminal joint of the maxillary palpus scarcely longer than the preceding joint. The occiput may be retracted under the apical margin of the thorax, but in *Zalobius* the occiput is elevated above the neck, so that it applies against the edge of the thorax.

One specimen. California without special locality, but I think given me by Mr. L. E. Ricksecker.

TOMARUS BISIGNATUS n. sp.

Pale fusco-testaceous, each elytron with a small piceous spot centrally placed, form of *pulchellus* but somewhat more acute behind, surface with moderately coarse pubescence. Head moderately coarsely, not closely punctate. Thorax twice as wide as long, slightly narrower at apex, sides moderately arcuate, disc convex more coarsely and less densely punctate than the head, basal foveæ well marked. Elytra punctate, the punctures somewhat larger and more distant than those of the thorax, very much finer and nearly obliterated at apex. Body beneath darker than above, sparsely finely punctulate. Legs pale. Length, .06 inch; 1.5 mm.

Camp Grant, Arizona; San José del Cabo.

The species of *Tomarus* are not numerous and may be distinguished in the following manner:

Elytra coarsely punctate, pubescence coarse.

Margin of thorax continuous; each elytron with a small piceous spot at center. *bisignatus.*

Margin of thorax irregular; each elytron with a piceous incomplete band at middle, a piceous area near the apex. *hirtellus.*

Elytra finely punctate or nearly smooth; pubescence fine.

Thorax not wider in front, anterior angles obtuse; elytral punctures distinct. *pulchellus.*

Thorax distinctly wider in front, anterior angles truncate; elytral punctation almost entirely obliterated; testaceous, each elytron with a transverse piceous spot at middle of the side margin. *acutus.*

Specimens of *pulchellus* have been collected in Arizona and at Los Angeles (Coquillett).

SCIRTES HUMERALIS n. sp.

Oval, slightly oblong, piceous, moderately shining, head and thorax rufescent, a reddish band along the side margin from the humerus one-third to apex, each elytron with an indefinite paler area at apex, surface sparsely fulvo-pubescent. Antennæ testaceous, gradually darker to tip. Head rufescent, sparsely punctate, occipital region narrowly piceous. Thorax sparsely punctate. Scutellum rufescent, piceous at middle, punctate. Elytra slightly more coarsely punctate than the thorax. Body beneath piceous; metapectus smooth; abdomen moderately closely punctulate. Legs rufo-testaceous, the femora darker. Length, .12 inch; 3 mm.

This species is more oblong and convex than the others of our fauna. It is most nearly related to *orbiculatus* by the presence of a distinct infra-orbital ridge.

One specimen. San José del Cabo.

MALTHODES LUCANUS n. sp.

Slender, piceous, thorax yellow. Antennæ slender longer than the body, joints two and three equal, each a little shorter than the fourth. Head shining with few punctures. Thorax broader than long, disc irregular

with few scattered punctures. Elytra as long as the body, scabrous, sparsely pubescent. Length, .10 inch; 2.5 mm.

Male. Last ventral large parallel, curved upward, channeled its entire length, acutely notched at tip. Last dorsal oval without processes. Pl. xx, fig. 2.

Allied most closely to *curvatus* Lec., but differs in the male characters, its color and by the shorter third joint of the antennæ.

One specimen. San José del Cabo.

MASTINOCERUS OPACULUS n. sp.

Slender, luteous yellow, abdomen piceous the last two segments yellow, surface very sparsely pubescent. Head scabro-punctate, but indistinctly. Thorax similar in form to that of *texanus* but less arcuately produced at apex, surface opaque very finely granular, with sparsely placed indistinct punctures. Elytra opaque, the disc very flat, surface minutely scabrous. Venter shining, sparsely punctate and pubescent. Length, .18 inch; 4.5 mm.

Closely resembles *texanus* but is much smaller, the dorsum more flat and the surface opaque without very decided sculpture.

Arizona, southern, but locality unknown.

Mr. Gorham (Biol. Cent. Am., iii, pt. 2, p. 106) seems to have the opinion that our species are not congeneric with the Chilian form described by Solier. The antennæ of the latter are said to have the eleventh joint biramose. While it is possible that such a character may be found, all instances heretofore mentioned have been found erroneous on second examination. Mr. Gorham admits that *Cenophengus* is related to *Mastinocerus*, because the second and third joints of the antennæ are short and without rami. This is equally true of both the *Mastinocerus* of our fauna.

The most remarkable opinion of Mr. Gorham is the placing of these genera together with *Pterotus* (which he does not know) in the *Lymexylonidæ*. To carry the idea to its legitimate extent, *Phengodes*, *Zarhipis* and *Tytthonyx* must also take the same course.

TELEGEUSIS n. g.

Facies of a *Malthinus*, slender depressed. Head oval, abruptly prolonged in front of the eye in a short muzzle, the clypeal region abruptly deflexed but not distinctly separated from the front, behind the eyes the head is feebly arcuately narrowed. Eyes prominent, finely granulated, distant from the thorax. Antennæ in front of the eyes inserted in the angle of the muzzle formed by the deflexed clypeus, eleven jointed (*female*) first joint stout, conical, longer than the next two together, second joint short, stout, shorter than the third, fourth longer than third, five to ten very slightly shorter, eleventh longer and fusiform. Labrum short and broad, anterior edge bisinuate. Mandibles falciform but not prominent, acute at tip. Mentum small, pentagonal. Labial palpi three, maxillary palpi four-jointed, the basal joints in each case very small, the terminal joint spathuliform and nearly as long as half the entire body. Thorax quadrate, slightly narrower at base. Scutellum longer than wide, parallel-sided, truncate at apex, longitudinally impressed. Elytra about half the length of the abdomen, dehiscent at their apical half, without distinct epipleuræ. Anterior and middle coxæ conical, prominent and contiguous, the mesocoxæ at apex only, the anterior with large trochantin. Abdomen flat, composed of eight segments, the first very short and lateral, the joints 2-7 nearly equal in length, eighth elongate oval, narrower. Legs moderate, femora not stout, tibiæ slender with distinct spurs. Hind tarsi longer than half the tibiæ, slender, first joint as

long as the next two, fourth scarcely bilobed. Claws simple. Body with well developed under-wings.

TELEGEUSIS DEBILIS n. sp.

Form slender, resembling *Mathinus*, testaceo-piceous, moderately shining, sparsely clothed with short semi-erect yellowish hairs. Head sparsely indistinctly punctate. Thorax quadrate with obtuse angles, apex truncate, base arcuate, sides slightly sinuate at middle, disc feebly convex with scarcely evident sparse punctuation, in each angle a distinct depression. Elytra half the length of abdomen, broader at base than the thorax, humeri rounded, surface sparsely punctate becoming gradually granulate and at apex densely granulate. Abdomen above sparsely punctate, the three basal segments almost entirely smooth, beneath more closely punctate. Legs and coxæ yellowish. Length, .22 inch; 5.5 mm. Pl. xx, fig. 1.

In this genus we doubtless have our first representative of the tribe Drilini. It is, however, remarkable in the length of the terminal joint of the palpi, nothing at all approaching it is known to me in the entire order of Coleoptera. The insect seems most nearly allied to *Drilus*, but in the absence of the male nothing positive can be asserted.

Sierra San Lazaro.

ATTALUS SETOSUS Horn, Proc. Cal. Acad. Sci., iv, p. 381.

This species was described from an unusually pale colored specimen. Others recently received show that the color may be entirely piceous, faintly bronzed. Others have simply a pale humeral spot, which extends and widens, covering nearly the entire elytral surface, except narrow sutural and marginal piceous stripes. It is easily known, however, in all its varieties by the short erect setæ.

In addition to San José del Cabo, it occurs at Miraflores, Sierra El Chinche, Santo Domingo del Taste and Sierra San Lazaro.

OCHODÆUS PENINSULARIS n. sp.

Oval, slightly oblong, fulvo-testaceous, sparsely clothed with short fulvous hair. Antennæ, except the first two points, piceous. Head very coarsely punctate, occiput slightly piceous, clypeus oval at middle, slightly sinuate each side, the margin narrowly reflexed, front not tuberculate. Thorax fully twice as wide as long, disc convex, not closely granulate, a vague median depression posteriorly. Elytra about one-fourth longer than broad, the striæ feebly impressed, moderately coarsely and closely punctate, intervals flat, very irregularly biserially punctate. Length, .16-.22 inch.; 4-5.5 mm.

The mentum is a little longer than wide, deeply impressed its whole length and emarginate in front.

In the six specimens examined, in which both sexes are undoubtedly represented, I find no armature either of the femora or tibiæ. The male hind tibiæ are, however, somewhat shorter and more hairy. This species is most closely related to *biarmatus*, and more especially the female, which has not the clypeal tubercles of the male. In both sexes of *biarmatus* the condyle of the hind femur forms a narrow plate along the posterior edge, terminating in a small tooth, one-third from the knee. No such structure exists in this species.

Sierra San Lazaro and Sierra El Taste.

OCHODÆUS CALIFORNICUS n. sp.

Broadly oval, piceous black, elytra dull brown, paler near the humeri. Head moderately closely punctate, without tubercles or ridges, clypeus arcuate, the margin not reflexed. Thorax twice as wide as long, moderately

densely tuberculate, a vague median impression posteriorly. Elytra vaguely striate, punctures of striæ coarse but not close, intervals flat, more closely and finely granulate than the thorax. Length, .18 inch.; 4.5 mm.

Mentum broader than long, deeply concave, the apex emarginate.

The unique before me is a female, and shows no armature of the legs.

This species, by the form of mentum and simple clypeus, is not especially related to any in our fauna. In its color it is unique, and might be mistaken for an *Onthophagus*.

Pomona, Cal., from H. C. Fall.

OCHODÆUS FRONTALIS Lec.

This occurs in Coahuila, Mex. It evidently escaped Mr. Bates' observation, unless O—4 (Lamellic. p. 107) is it.

RHOPALOPHORA BICINCTA n. sp.

Black, rather dull, elytra with a basal and a post-median slightly arcuate narrow band of silvery white pubescence. Head closely punctate, occiput between the eyes smoother. Antennæ (*female*) yellow, not longer than the body, joints 5–10, gradually shorter, 11 slightly longer than 10, joints 8–10 slightly serrate. Thorax as in *R. longipes*, sparsely punctate, more closely on the flanks, surface alutaceous, beneath more shining, slightly transversely wrinkled and sparsely punctate. Elytra parallel, scarcely wider than the thorax, apices obtuse 3 or 4 dentate, surface closely cribrate punctate. Body beneath black, shining, sparsely punctate and with sparse hairs, but with denser patches of silvery white pubescence at the sides of mesosternum, the hind angles of metasternum and at the sides of the first ventral segment along

the suture. Legs piceo-testaceous, the tibiæ paler, the femora at base darker. Length .20 inch.; 5 mm.

This species is placed temporarily in the genus from its very close resemblance in all the more important structural details, although the antennæ suggest a relationship with the *Cleomenides*, as defined by Lacordaire. The antennæ are not setaceous as in *Rhopalophora*, but rather filiform, the three penultimate joints slightly flattened and subseviate.

The specimen at my disposal is a female and unique, from which the useful parts of the mouth have disappeared. The ornamentation of the elytra is not in line with *Rhopalophorus*, and it seems very probable that the discovery of the male will show the necessity for suggesting a new generic name.

One specimen. San José del Cabo.

DYSPHAGA DEBILIS n. sp.

Slender, elongate, pale yellowish testaceous, abdomen piceous. Front not punctate, neck obsoletely punctate. Thorax a little wider at middle than long, sides slightly arcuate, surface dull, not distinctly punctate, sparsely pubescent. Elytra one-third longer than the head and thorax, extending beyond the middle of the abdomen, surface shining, slightly wrinkled and vaguely bicostulate. Abdomen piceous, the last ventral segment yellow at apical half. Length, .18 inch; 4.5 mm.

The single specimen has the last ventral deeply triangularly incised. This is thought by Dr. LeConte to be a female character.

San José del Cabo.

The species of *Dysphaga* are few in number and specimens are always rare. They may be separated as follows:

Head and thorax piceous black.

Thorax distinctly punctate; elytra not costulate.

tenuipes.

Thorax smoother bicallous at base.

lavis.

Head and thorax reddish yellow; elytra piceous and distinctly bicostulate.

bicolor.

Pale yellowish testaceous, elytra bicostulate.

debilis.

METACOLASPIS n. g.

Head oval, not deeply inserted, eyes free, entire, not very convex, oval, finely granulated; front feebly sculptured, clypeus not distinctly separated, labrum short, transverse. Last joint of maxillary palpi slender, attenuate at tip, longer than the preceding joint. Antennæ slender, three-fourths the length of body, first joint thickened, second one shorter than the third, joints 3-11 gradually slightly longer. Prothorax transverse, the front angles not dentiform, hind angles very obtuse, lateral margin entire. Scutellum oval obtuse at apex. Elytra very irregularly substriately punctate. Prosternum between the coxæ twice as long as wide. Legs moderate in length, femora slightly fusiform, the tibiæ slender, the four posterior feebly emarginate at outer angle of the tip. Tarsi moderate in length, claws deeply bifid, the inner division long and slender.

The insect for which the above generic name is proposed has the general aspect of *Colaspis brunnea* except the color. It is certainly allied to *Metachroma* by the structure of the prothoracic episterna, the bifid claws and the emarginate tibiæ.

From *Metachroma* it differs in having the second antennal joint much shorter than the third. The other two genera are from Malacca and the Philippine Islands. *Pyropida* has a broad prosternum and less deeply bifid claws, *Chrysopida* has dentate femora.

METACOLASPIS CONSPERSA n. sp.

Form moderately robust, general color pale yellowish-white, antennæ, metapectus, tibiæ and tarsi piceous; elytra brown with numerous yellowish-white spots usually small, irregularly placed, surface glabrous. Head smooth. Thorax one-half wider than long, sides feebly arcuate, front angles distinct, hind angles obtuse, surface polished with numerous moderately coarse punctures at the sides. Scutellum smooth. Elytra wider at base than the thorax, about one-third longer than wide, sides feebly arcuate, disc convex with closely placed deep punctures, substriately arranged with three faintly indicated costæ. Body beneath smooth, sides of metapectus finely punctate and pubescent. Length, .16 inch; 4 mm.

San José del Cabo.

COLASPIS MÆSTA n. sp.

Form robust, piceous, upper surface feebly dark-bronzed, moderately shining. Antennæ piceous, the basal five joints gradually paler. Head punctate, less closely on the occiput. Thorax twice as wide as long, narrower in front, sides broadly arcuate, scarcely undulate, margin narrowly reflexed, disc convex, finely punctate, but more coarsely at sides. Elytra very little wider than the thorax, disc vaguely subcostate near the apex, surface moderately coarsely, irregularly, not densely punctate. Body beneath very sparsely punctate. Legs piceous, the front and middle femora and all the coxæ slightly paler. Length, .25 inch; 6.5 mm.

Similar in form to *Rhabdopterus picipes*, but larger and more robust. It seems most nearly related in our fauna to *C. nigrocyanea*, and like that species has the prosternum rather wider than in the other Colaspis.

San José del Cabo.

BLEPHARIDA ATRIPENNIS n. sp.

Form moderately robust, rufo-testaceous, antennæ, elytra, tibiæ and tarsi piceous black. Basal joint of antennæ testaceous in front. Head smooth. Thorax fully twice as wide as long, slightly narrowed in front, front angle slightly nodiform, hind angle obtuse, disc convex, smooth, sparsely finely punctate. Scutellum smooth, rufo-testaceous. Elytra slightly wider than the thorax, oval, one-third longer than wide, convex, surface dull, very finely alutaceous, irregularly geminately striato-punctate, the punctures not coarse nor close. Body beneath sparsely punctate, slightly pubescent on abdomen and sides of metapectus. Length, .22 inch; 5.5 mm.

While the species is placed in *Blepharida* as a matter of expediency, there does not seem to be any valid character for its separation from that genus. The only other species at present in hand is our *rhois*, which differs in some characters from those given by Chapuis. The elytral sculpture differs notably from that of *rhois*, but several Mexican species resemble it in this respect.

San José del Cabo.

CREPIDODERA PENINSULARIS n. sp.

Oval, moderately robust, rufo-testaceous, elytra piceo-rufous with distinctly æneous surface. Head smooth, antennæ darker at tip. Thorax twice as wide as long, slightly narrowed in front, anterior angles truncate, hind angles acute, sides moderately arcuate, disc convex, with few coarse irregularly placed punctures, transverse impression moderately deep and with punctures. Elytra wider at base than the thorax, humeri obtuse, surface with rows of coarse and deep but not very closely placed punctures, intervals not convex, smooth. Body beneath smooth, abdomen indistinctly punctate and alutaceous. Legs paler. Length, .10 inch; 2.5 mm.

This species is not particularly related to any in the Boreal fauna, but is probably nearer *chiriquensis*, although from description abundantly distinct.

One specimen. San José del Cabo.

LUPERODES HISTRIO n. sp.

Form oblong, color variable above, beneath yellowish, metapectus piceous. Antennæ rather longer than half the body, testaceous, the apex and front edge of each joint piceous. Head smooth, blue or green, the front yellow. Thorax slightly wider than long, not narrowed in front, sides slightly arcuate anteriorly, a feeble sinuation posteriorly, hind angles acute, the anterior slightly nodiform, disc moderately convex, scarcely perceptibly punctulate. Elytra wider than the thorax, twice as long as wide, sides nearly parallel, disc moderately convex, sparsely regularly, finely punctate. Body beneath yellow, sides of metapectus piceous, surface sparsely punctate with short hairs. Femora yellow, with upper edge and apex piceous, tibiæ and tarsi piceous. Length, .16-.22 inch; 4-5.5 mm.

This insect is very variable in color.

Typical form: Head bicolored; this is constant in all the varieties. Thorax yellow. Elytra violet-blue to green, with an elongate yellow spot from base to middle, narrowing behind, an oval spot near the apex.

Variety: Thorax piceous with greenish surface lustre, the borders very narrowly pale. Elytra greenish, a basal, elongate oval pale spot.

Variety: Thorax entirely yellow. Elytra almost entirely yellow, with a very narrow greenish margin all around and along the suture.

This species is placed in *Luperodes*, or rather the generic name is adopted for reasons given by me in a synop-

sis of Galerucini of Boreal America (Trans. Am. Ent. Soc. 1893, p. 108). It is, however, quite certain that some other use or arrangement of characters must be adopted for the genera of the group Luperites as defined by Chapuis.

Sierra San Lazaro, Sierra El Chinche.

SCELOLYPERUS CYANELLUS n. sp.

Form elongate, piceous black, moderately shining, elytra violaceous, blue or bluish-green. Head smooth. Thorax quadrate, very little longer than wide, sides very feebly arcuate, anterior angles slightly nodiform, hind angles sharply rectangular, disc moderately convex, smooth. Elytra one-half wider than the thorax, twice as wide as long, disc moderately convex, sparsely punctulate. Body beneath piceous or blue-black, sparsely punctulate and pubescent. Legs black, femora bluish, alutaceous, the anterior and middle coxæ and all the trochanters yellow. Length, .12-.16 inch; 3-4 mm.

The males have the posterior tibiæ straight. Variations occur which seem to be merely due to immaturity—the antennæ may be brownish-yellow and the under side of prothorax, tibiæ and tarsi yellowish-testaceous.

This species resembles a diminutive form of that variety of *maculicollis* with black thorax.

El Taste and San José del Cabo.

TRIPHALUS CRIBRICOLLIS n. sp.

Piceous black, feebly shining. Head moderately coarsely and closely punctate with a slight tendency to become strigose; mandibles more densely and finely punctate. Thorax quadrate, slightly broader than long and slightly narrower in front, sides very slightly arcuate, base arcuate, disc convex coarsely and closely punctate, each puncture (as on the head) bearing a short yellow

hair. Elytra regularly oval, broadest at middle, one-half longer than wide, base not wider than base of thorax, disc convex with the striae of coarse punctures not closely placed, intervals slightly convex and with two series of finer punctures irregularly placed each bearing a short yellow hair. Body beneath more shining than above, coarsely but not closely punctate. Length, .22 inch; 5.5 mm.

Similar in form to *perforatus*, but with the striae of the elytra more closely and the thorax more densely punctured. The finer punctures of the intervals in *perforatus* are scarcely evident and the hairs very short.

One specimen. Miraflores.

CERENOPUS ANGUSTATUS Horn. Proc. Cal. Acad. Sci. 1894, p. 426.

A recent invoice with a dozen specimens shows that my description of the female was erroneous. The female at hand was merely a feeble specimen of *concolor*.

The female of *angustatus* has the clypeus very different from the male, which may be described as truncate with an abrupt median notch either oval or subtriangular. In the female there is a deep sinuation each side of the notch and the angles are obtusely produced so that the front has somewhat a quadridentate appearance. The posterior femora have on the inner side of the lower edge a series of well marked tubercles. Pl. xx, figs. 4, 5.

In addition to the locality at San José del Cabo it also occurs at Pescadero, Santo Domingo del Taste, Sierra El Chinche, San Lazaro and Miraflores.

MACROBASIS LANGUIDA n. sp.

Form slender, general color pale luteous clothed with slightly paler pubescence, antennae and tarsi black. Thorax longer than wide, a feebly impressed median line.

Tarsi black with a ring of whitish pubescence at the base of each joint. Length, .40 inch; 10 mm.

Male. Antennæ setaceous the first joint as long as the next two, not sinuate at apex, second three-fourths as long and equal to the next three joints together. Anterior tibiæ with two terminal spurs, the first joint of tarsi longer than the second. Last ventral segment incised.

This species resembles *linearis* very closely and it is probable that the females will be difficult to separate.

San José del Cabo.

At the time of my study of *Macrobasis* (Proc. Amer. Philos. Soc. 1873) the male of *linearis* was unknown. The following are the sexual characters which will separate it from *languida*:

M. linearis ♂ Lec. Antennæ setaceous, the first joint as long as the next five not sinuate at tip, second joint scarcely a third of the first. Anterior tibiæ with a single spur, first joint of tarsi much shorter than the second and strongly compressed at base.

OTIDOCEPHALUS ALTERNATUS n. sp.

Form of *vittatus*, piceous black, shining, clothed with recumbent and not dense gray hairs the alternate intervals of the elytra naked, without erect setæ. Rostrum smooth in front, not carinate, punctate at the sides. Thorax elongate oval, one-half longer than wide, equally narrowed at apex and base, regularly convex, coarsely not closely punctate. Scutellum densely clothed with white pubescence. Elytra elongate oval, widest at middle, humeri well marked. Punctures in striæ rather coarse and closely placed, intervals slightly convex, intervals 2-4-6-8 moderately densely pubescent, the others sparsely biserially punctate, each puncture with a hair. Body beneath sparsely hairy, a denser line at the sides of meso- and metapectus. Legs brownish, sparsely punctate and

hairy. The femora with a small tooth. Length, sine rost., .18 inch; 4.5 mm.

Related to *vittatus* and with similar vestiture but less dense, the hairs are simple and not tufted. It differs also in the absence of smooth thoracic line and is without erect setæ.

One specimen. La Paz.

OTIDOCEPHALUS SPARSUS n. sp.

Form of *scrobicollis*, piceous black shining, surface clothed with tufted pubescence not closely placed, thorax and elytra with erect white hairs. Rostrum coarsely punctate, smooth at middle in front. Thorax slightly oval, equally narrowed at apex and base, one-half longer than wide, sides feebly arcuate, disc convex, very coarsely and deeply, moderately closely punctate, tufted hairs not closely placed, erect hairs directed toward the front. Elytra oblong oval, widest slightly behind the middle, humeri distinct, surface with striæ of moderately coarse punctures, not deep nor closely placed, intervals flat sparsely punctate. Body beneath sparsely clothed with tufted hairs and erect setæ. Legs piceous, tarsi pale. Femora with small tooth. Claws with broad rectangular tooth at base. Length, .18 inch; 4.5 mm.

This species does not particularly resemble any in our fauna; it has vestiture similar to *Ulkei*, but less dense.

One specimen in my cabinet, probably from the Cape Region.

OTIDOCEPHALUS CARINICOLLIS, n. sp.

Form of *scrobicollis*, piceous black, surface very dark bronze, shining, clothed with grayish pubescence with smooth spaces, the intervals with semi-erect black setæ. Rostrum vaguely bisulcate each side. Thorax elongate oval, one-third longer than wide, widest slightly in front

of middle, base and apex equal, disc convex, very coarsely deeply and moderately closely punctate, the median line carinate from base two-thirds to apex. Elytra oval, widest slightly behind the middle, humeri distinct, disc with distinctly impressed striæ having coarse, deeply impressed and rather closely placed punctures, intervals flat. Body beneath clothed with much finer pubescence than the upper surface. Tibiæ and the femora at base rufescent. Femora with a small tooth. Claws with quadrangular tooth at base. Length, .21 inch; 5.25 mm.

This species viewed in profile is more convex than any of our hairy species, resembling in this respect *Chevrolati*. The vestiture of the upper surface is rather formed of very large narrow scales than simple hairs. They are however not at all tufted as in *sparsus* or *Ulkei*. The carinate thorax will at once separate it from any of our species.

Occurs in Texas. One specimen was given me by Dr. Dohrn as from California, but I believe the locality erroneous.

In the Annals of the N. Y. Acad. Sc., 1892, Capt. Casey reviews the species of *Otidocephalus* describing several new ones. *O. nivosus* from intermediate specimens from Utah does not seem specifically separable from *vittatus*.

O. cavirostris should be compared with *Poeyi*, the inflated and excavated beak on which so much stress is laid is purely a sexual character. (See Lac. Genera, vi, p. 569, note, also Schoenh. Curcul. vii, 2, p. 208. Neither author, however, recognizes that it is a male character.)

O. perforatus Horn. has been separated as a distinct genus, *Oopterinus*, based on the absence of scutellum. The genus is not valid, as a distinct scutellum exists although less evident than in the species with distinct humeri.

COPTURUS SOBRINUS n. sp.

Piceous, elytra, legs and beak castaneous. Rostrum and sides of head with broad white scales, eyes contiguous on the front. Thorax a little broader at base than long, slightly narrower in front, feebly constricted at apex, sides feebly arcuate, disc slightly convex, coarsely, deeply and closely punctate, at sides with broad white scales, at middle a short line from the base with narrower scales. Elytra deeply striate with elongate punctures, intervals subcostiform and imbricately sculptured, color castaneous ornamented with short lines of white scales on the intervals forming in a general way a basal band, a humeral lunule extending inward at middle, a white area on the suture near the apex, another at sides near apex, the scales otherwise are brownish. Body beneath and legs densely clothed with white scales, broad on the body, narrow on the legs. Length, .08 inch; 2 mm.

Closely related to *minutus* in color, form and markings, but it is readily known by the form of elytral intervals. In *minutus* the intervals are flat and decidedly wider than the striæ, the intervals of *sobrinus* are subcostiform and narrower than the striæ. The antennæ are similar in that the second joint of the funicle is scarcely visibly longer than the third.

La Paz, Sierra San Lazaro, Sierra El Taste.

ZASCELIS OBLONGA n. sp.

Oblong, form of *irrorata*, dark brown, dull, sparsely clothed with dull white, slim, erect hairs, with more erect short black setæ intermixed. Rostrum very coarsely cribrate, at base slightly expanded, forming alæ over the scrobes. Head coarsely and deeply perforate punctate. Thorax a little wider at base than long, sides obliquely convergent at apical third, posteriorly parallel, disc mod-

erately coarsely, deeply and closely punctate, with faintly indicated median carina. Elytra wider at base than the thorax, disc not depressed, striæ with deep quadrate punctures, intervals flat, the third and fifth finely carinate, rather roughly punctate. Body beneath coarsely, closely and equally punctate. Femora not toothed, tibiæ serrate. Length, .18-.22 inch.; 4.5-5.5 mm.

Allied in its vestiture to *serripes*, but in form to *irrorata*. Is much less robust and with less coarsely toothed tibiæ than the first, and differs from the second in vestiture and the absence of femoral tooth.

Two specimens. Arizona, Sierra San Lazaro.

CONOTRACHELUS LUCANUS n. sp.

Oblong oval, similar in form to *naso*, piceous, dull, elytra marmorate with brownish and dirty white hairs, the latter more evident at the sides and with four more conspicuous white spots at the base of the third and sixth intervals. Antennæ rufescent, inserted less than a third from the tip of the rostrum, which is rather deeply trisulcate on each side, the sulci coarsely punctured, surface glabrous, a few hairs near the base. Head densely punctate, with fulvous hairs. Thorax quadrate, a little wider than long, abruptly constricted in front, sides feebly arcuate, disc convex, very coarsely cribrate, with a median carinà from apex, not quite reaching the base, surface with sparse erect hairs. Elytra more than half wider at base than the thorax, humeri not acute, disc with striæ of quadrate punctures not densely placed, the intervals 3-5-7-9 finely carinate, and with a row of short erect hairs. Body beneath very coarsely and deeply punctate. Mesosternum protuberant. Femora unidentate, claws divergent and acutely toothed. Length, .20 inch.; 5 mm.

This species belongs to the group defined by Dr.

LeConte as 1—B (Rhynchophora, p. 239), and by the moderate length of beak, which is strongly striate, and by the protuberant mesosternum, is allied to *posticatus*. It resembles the latter species in the vestiture, and differs especially in the very coarse sculpture of the thorax, which approaches that of *cribricollis*.

One specimen. San José del Cabo.

CONOTRACHELUS ECHINATUS n. sp.

Form of *erinaceus*, piceous, clothed with luteous and dark brown scales, indiscriminately intermixed on the thorax, on the elytra at declivity an indefinite band of the paler color, on the intervals are moderately long black hairs, in the punctures of the striae a slender pale hair. Beak longer than head and thorax, sulcate at the sides, in front rather densely scaly and with erect hairs, antennae inserted close to the tip. Thorax wider than long, not greatly constricted in front, sides feebly arcuate, disc convex, coarsely, deeply and not closely punctate. Elytra nearly twice as wide at base as the thorax, one-third longer than wide, humeri prominent but not dentiform, disc striate, striae punctate, intervals flat. Abdomen coarsely and deeply punctate. Legs piceous, tibiae and tarsi paler, densely scaly and with whitish hairs. Femora not toothed. Claws cleft. Length, .10 inch; 2.5 mm.

This species belongs to a small group containing but two species, characterized by the cleft claws and the presence of erect setae on the intervals. It differs from either of the two at present known by the style of vestiture, the longer erect hairs and the entire absence of femoral tooth. As is usual with species of bicolored scales the surface is variegated in color and not purely piceous.

Two specimens. Southern Arizona.

EXPLANATION OF PLATE XX.

- Fig. 1. *Telegeusis debilis* Horn, greatly enlarged.
Fig. 2. *Malthodes lucanus* Horn, terminal ventral segments of male, underneath view.
Fig. 3. *Malthodes lucanus* Horn, terminal ventral segments of male, lateral view.
Fig. 4. Head of male *Cerenopus angustatus* Horn.
Fig. 5. Head of female of same.
Fig. 6. *Anisotoma valida* Horn, hind leg of male.
Fig. 7. *Anisotoma Merkeliana* Horn, hind leg of male.
Fig. 8. *Zalobius spinicollis* Lec.
Fig. 9. *Zalobius serricollis* Lec.
Fig. 10. *Asemobius cælatns* Horn.